## CAP cadets take to Auburn University engineering labs

## **Curt LaFond**

Program Manager Cadet & Senior Member Professional Development CAP National Headquarters

NATIONAL HEADQUARTERS — Hosted by Auburn University's Department of Textile Engineering, 19 Civil Air Patrol cadets from across the nation were on campus July 12-19 week for "E-Tech" — CAP's Engineering Technologies Academy.

The cadets, mostly high school juniors, attended lectures and worked in the labs to broaden their understanding of engineering.

"I came to see if I like doing engineering," said Drew McIlvaine, 16, from Chattanooga, Tenn., "and to find out if I want to spend my life as an aerospace engineer."

Coming from CAP, the cadets were particularly interested in the aerospace sciences. They designed and built airfoils from composite materials in the school's textile labs and tested them in the smoke tunnel.

Cadet Brian Doyle, 17, of Pennsylvania, said "I liked creating and testing my own airfoil, and also watching the shock wave in the supersonic wind tunnel."

Auburn's supersonic wind tunnel is not the only campus attraction that caught the cadets' attention.

"I liked the cars." said James Bracy, 16, from Vermont, "they're cool and now I want to study mechanical engineering and build a Baja car from scratch when I come to Auburn."

According to an Aerospace Industries Association report, America is facing a "major work-force crisis in its aerospace industry," which makes the promotion of math and science education a vital national interest.

"Auburn is supporting our CAP cadets," said Ray Bean, deputy director of cadet and senior professional development at CAP National Headquarters "to encourage high school students to look at engineering as a field of study or a career."

The 2003 E-Tech graduates were: Michael Beyer, Indiana Wing; Erica O'Brien, Maryland Wing; David Benes, Maryland Wing; John Lovette, North Carolina Wing; David McFall, South Carolina Wing; Michael Winn, Virginia Wing; Erik Martin, Virginia Wing; James Bracy, New Hampshire Wing; Casey Lasell, New Hampshire Wing; Brian Doyle Pennsylvania Wing; Trevor Munson, Colorado Wing; Christian Nielsen, Florida Wing; Steven Mellard, Georgia Wing; Drew McIlvaine, Tennessee Wing; Scott Osterloh, Arizona Wing; Byron Quine, Texas Wing; Sarah Gilbert, Tennessee Wing; Molli Frisone, Ohio Wing; and Samantha Linsley, Texas Wing.

E-tech staff members were: Mai. Roy Good, activity director, North Carolina Wing: Lt. Col. Warren Vest. Virginia Wing: Capt. Michael Garman, Alabama Wing; Sr. Mbr. Beth Lovette, North Carolina Wing; and Curt LaFond, CAP National Headquarters.





Top. clockwise from left, cadets Scott Osterloh, **Byron Quine. Christian Nielson** and David Benes test the engine powering their model aircraft during "E-Tech." -Left. cadet Trevor Munson makes some final adjustments before running windtunnel tests on the airfoil he designed and built using fibrous composite materials.